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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,672	06/24/2003	Satoru Sugishita	239340US2	8443

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EXAMINER

SINGH, SATWANT K

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/20/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No. 10/601,672	Applicant(s) SUGISHITA ET AL.	
	Examiner Satwant K. Singh	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :11/03/03, 08/23/05, 06/27/06, and 11/09/06.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 7-10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuchitoy et al. (US 6,906,813) in view of Bhogal et al. (US 2002/0063884).

3. Regarding Claim 1, Tuchitoy et al teach an image reproducing apparatus comprising: suspending means that suspend a prescribed operation regarding image reproduction (print suspend request) (col. 8, lines 16-33); releasing means that release the image reproducing apparatus from the suspended state (print resume request) (col. 8, lines 16-33); a job accepting unit that accepts multiple types of image-reproduction-related jobs in parallel (job table 313) (col. 7, lines 66-67, col. 8, lines 1-6).

Tuchitoy et al fail to teach an image reproducing apparatus comprising: a determination unit that, when an execution start request for a first job is received at the job accepting unit after the release from the suspended state, determines whether a second job with a higher priority than the first job is executable among said multiple types of jobs; and a control unit that withholds execution of the first job if the second job is executable.

Bhogal et al teach an image reproducing apparatus comprising: a determination unit that, when an execution start request for a first job is received at the job accepting unit after the release from the suspended state, determines whether a second job with a higher priority than the first job is executable among said multiple types of jobs (Fig. 4, S405) (page 3, paragraphs [0034]-[0035]); and a control unit that withholds execution of the first job if the second job is executable (Fig. 4, S407) (page 3, paragraph [0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Tuchitoy with the teaching of Bhogal for managing printing priorities of multiple print jobs.

4. Regarding Claim 2, Tuchitoy et al teach an image reproducing apparatus, wherein: the suspending means suspend paper ejection to a prescribed paper-eject tray (Fig. 13, suspend print, paper eject designation); and when the execution start request for the first job that requires paper ejection to said prescribed paper-eject tray is received at the job accepting unit after the release from the suspended state, the determination unit determines whether the second job that requires paper ejection to the prescribed paper-eject tray and that has the higher priority than the first job is executable among said multiple types of jobs (Fig. 13, promote print, paper eject designation) (col. 9, lines 59-67, col. 10, lines 1-20).

5. Regarding Claim 7, Tuchitoy et al teach an image reproducing apparatus, wherein the releasing means release the image reproducing apparatus from the suspended state when the prescribed paper-eject tray returns to a predetermined position (Fig. 13, suspend print, paper eject designation).

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6. Regarding Claim 8, Tuchitoy et al teach an image reproducing apparatus, wherein the job accepting unit receives a third execution start request for a third job that requires paper ejection to a tray other than said prescribed paper-eject tray, and the determination unit allows the control unit to cause the third job to be executed, without determining the higher priority between the third job and the first job (Fig. 13, promote print, paper eject designation) (col. 9, lines 49-67, col. 10, lines 1-20).

7. Regarding Claim 9, Tuchitoy et al teach an image reproducing method comprising the steps of: accepting multiple types of image-reproduction-related jobs in parallel in an image reproducing apparatus (job table 313) (col. 7, lines 66-67, col. 8, lines 1-6); receiving a first instruction for suspending a prescribed operation regarding image reproduction (print suspend request) (col. 8, lines 16-33; receiving a second instruction for releasing the image reproducing apparatus from the suspended state) (print resume request) (col. 8, lines 16-33).

Tuchitoy et al fail to teach an image reproducing method comprising the steps of: when receiving an execution start request for a first job after the release from the suspended state, determining whether there is a second job with a higher priority than the first job among said multiple types of jobs; if there is the second job, determining whether the second job is executable; and if the second job is executable, withholding execution of the first job, while executing the second job.

Bhogal et al fail to teach an image reproducing method comprising the steps of: when receiving an execution start request for a first job after the release from the suspended state, determining whether there is a second job with a higher priority than the first job among said multiple types of jobs (Fig. 4, S405) (page 3, paragraphs [0034]-

[0035]); if there is the second job, determining whether the second job is executable; and if the second job is executable, withholding execution of the first job, while executing the second job (Fig. 4, S407) (page 3, paragraph [0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Tuchitoy with the teaching of Bhogal for managing printing priorities of multiple print jobs.

8. Regarding Claim 10, Tuchitoy teach an image reproducing method, wherein: the first instruction is for suspending paper ejection to a prescribed paper-eject tray (Fig. 13, suspend print, paper eject designation); when the execution start request for the first job requiring paper ejection to said paper-eject tray after the release from the suspended state is received, determining whether there is the second job that requires paper ejection to said paper-eject tray and has the higher priority than the first job among said multiple type of jobs (Fig. 13, promote print, paper eject designation) (col. 9, lines 59-67, col. 10, lines 1-20).

9. Regarding Claim 12, Tuchitoy et al teach an image forming method, further comprising the steps of: receiving a third execution request for a third job that requires paper ejection to a tray other than said paper-eject tray; and executing the third job without determining the higher priority between the first job and the third job (Fig. 13, promote print, paper eject designation) (col. 9, lines 49-67, col. 10, lines 1-20).

10. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuchitoy et al and Bhogal et al as applied to claim 1 above, and further in view of Valorose, III (US 2002/0059265).

11. Regarding Claim 3, Tuchitai et al fail to teach an image reproducing apparatus further comprising a timer, wherein: when the execution start request for the first job is received at the job accepting unit after the release from the suspended state, the timer starts counting a prescribed time; the determination unit determines whether a second execution start request for the second job with the higher priority than the first job is generated within the prescribed time; and the control unit withholds execution of the first job if the second execution start request for the second job is generated within the prescribed time and if the second job is executable.

Bhogal et al teach an image reproducing apparatus wherein: when the execution start request for the first job is received at the job accepting unit after the release from the suspended state (Fig. 4, S402) (page 3, paragraph [0033]); the determination unit determines whether a second execution start request for the second job with the higher priority than the first job is generated (Fig. 4, S405) (page 3, paragraphs [0034]-[0035]); and the control unit withholds execution of the first job if the second execution start request for the second job is generated and if the second job is executable (Fig. 4, S407) (page 3, paragraph [0035]).

Bhogal et al fail to teach an image reproducing apparatus, further comprising a timer, wherein: the timer starts counting a prescribed time.

Valorose, III teaches an image reproducing apparatus, further comprising a timer, wherein: the timer starts counting a prescribed time (timer) (Fig. 3, S105) (page 7, paragraphs [0067] and [0077]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Tuchitai and Bhogal with the

teaching of Valorose to decrease processing time by using a timer for managing the printing priorities of multiple print jobs.

12. Regarding Claim 4, Tuchitoy et al fail to teach an image reproducing apparatus, wherein if the second execution start request for the second job is not generated within the prescribed time, or if the second job is not executable, then the control unit allows the first job to be executed generated.

Bhogal et al teach an image reproducing apparatus, wherein if the second execution start request for the second job is not generated within the prescribed time, or if the second job is not executable, then the control unit allows the first job to be executed generated (Fig. 4, S405, S406) (page 3, paragraphs [0034]-[0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Tuchitoy with the teaching of Bhogal for managing printing priorities of multiple print jobs.

13. Claims 5, 6, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuchitoy et al and Bhogal et al as applied to claim 1 above, and further in view of Yoshida et al. (US 6,130,757).

14. Regarding Claim 5, Tuchitoy et al and Bhogal et al fail to teach an image reproducing apparatus, wherein different types of applications are installed in the apparatus, and said multiple types of jobs are generated from said different types of applications.

Yoshida et al teaches an image reproducing apparatus, wherein different types of applications are installed in the apparatus, and said multiple types of jobs are generated

from said different types of applications (Figs 18A and 20) (col. 13, lines 65-67, col. 14, lines 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Tuchitai and Bhogal with the teaching of Yoshida to allow for the printing of various types of documents.

15. Regarding Claim 6, Tuchitai et al fail to teach an image reproducing apparatus, wherein: when the execution start request for the first job is received at the job accepting unit after the release from the suspended state, the determination unit inquires of each of the applications about whether there is another execution start request for the second job with the higher priority than the first job; if there is said other execution start request for the second job in any of the applications, the determination unit further determines whether the second job is executable; and if the second job is executable, the control unit withholds execution of the first job.

Bhogal et al teach an image reproducing apparatus, wherein: when the execution start request for the first job is received at the job accepting unit after the release from the suspended state (Fig. 4, S402) (page 3, paragraph [0033]), the determination unit inquires of each of the applications about whether there is another execution start request for the second job with the higher priority than the first job (Fig. 4, S405) (page 3, paragraphs [0034]-[0035]); if there is said other execution start request for the second job in any of the applications, the determination unit further determines whether the second job is executable (Fig. 4, S405) (page 3, paragraphs [0034]-[0035]); and if the second job is executable, the control unit withholds execution of the first job (Fig. 4, S407) (page 3, paragraph [0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Tuchitoy with the teaching of Bhogal for managing printing priorities of multiple print jobs.

16. Regarding Claim 11, Tuchitoy et al teach an image reproducing method, further comprising the steps of: accepting said multiple types of image-reproduction-related jobs in parallel from the different types of applications (job table 313) (col. 7, lines 66-67, col. 8, lines 1-6).

Tuchitoy et al fail to teach an image reproducing method, further comprising the steps of: installing different types of image-reproduction-related applications in the image reproducing apparatus; when receiving the execution start request from the first job after the release from the suspended state, inquiring of each of the applications whether there is another execution start request; and based on the inquiry, determining whether there is a second execution start request for the second job with higher priority than the first job.

Bhogal et al teach an image reproducing method, further comprising the steps of: when receiving the execution start request from the first job after the release from the suspended state, inquiring of each of the applications whether there is another execution start request (Fig. 4, S402) (page 3, paragraph [0033]); and based on the inquiry, determining whether there is a second execution start request for the second job with higher priority than the first job (Fig. 4, S405) (page 3, paragraphs [0034]-[0035]).

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Bhogal et al fail to teach an image reproducing method, further comprising the steps of: installing different types of image-reproduction-related applications in the image reproducing apparatus.

Yoshida et al teach an image reproducing method, further comprising the steps of: installing different types of image-reproduction-related applications in the image reproducing apparatus (Figs 18A and 20) (col. 13, lines 65-67, col. 14, lines 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Tuchitai and Bhogal with the teaching of Yoshida to manage the priority printing of various types of documents.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Osada et al. (US 6,600,569) discloses a printing control apparatus for analyzing and processing an input print job.

Salgado et al. (US 6,7174,690) discloses a method and apparatus for prioritizing the use of multi-functional printing system's basic processing resources for multiple banded image processing.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (571) 272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


sks

Satwant K. Singh
Examiner
Art Unit 2625


KING Y. POON
PRIMARY EXAMINER